

WHAT IS CLAIMED IS:

1. A method for image processing comprising the steps of:
  - identifying a container region and an object to be inserted into the container region;
  - determining a placement location for the object within said container region and a scale factor associated therewith; and
  - inserting said object into said container region at said placement location using said scale factor.
2. The method of claim 1, wherein said container region is part of a first image and said object is part of a second image.
3. The method of claim 1, wherein said step of identifying said container region further comprises the steps of:
  - evaluating pixels neighboring a seed pixel to determine if said pixels have a similar color value as said seed pixel; and
  - growing said container region by iteratively identifying pixels having said similar color value.

4. The method of claim 1, wherein said step of identifying said object further comprises the steps of:

evaluating pixels in a boundary region to determine if said pixels have a similar color value to as a boundary pixel; and

growing said boundary region by iteratively identifying pixels having said similar color value.

5. The method of claim 1, wherein said step of determining a placement location within said container region and said scale factor associated with said object further comprises the steps of:

determining a scale factor;

determining whether said object will fit into said container region at said scale factor;

if said object will fit into said container region at at least one location, selecting a placement location for said object; and

otherwise, reducing said scale factor and determining whether said object will fit into said container region at said reduced scale factor.

6. The method of claim 2, further comprising the step of:

downsampling said first image prior to identifying said container region

7. The method of claim 1, wherein said step of selecting said placement location for said object further comprises the steps of:

identifying a plurality of feasible placement locations for said object within said container region at said scale factor; and

selecting one of said plurality of feasible placement locations as said placement location.

8. The method of claim 7, wherein said step of selecting one of said plurality of feasible placement locations as said placement location further comprises the step of:

determining a mean center associated with origin points of said plurality of feasible placement locations; and

selecting said mean center as an origin point of said placement location.

9. The method of claim 1, wherein said step of inserting said object into said container region at said placement location using said scale factor further comprises the steps of:

determining a boundary associated with a scaled version of said object;

storing said boundary and said placement location; and

inserting said object into said container region using said stored boundary and placement location.

10. A computer-readable medium containing a program that performs the steps of:

identifying a container region and an object to be inserted into the container region;  
determining a placement location for the object within said container region and a scale factor associated therewith; and  
inserting said object into said container region at said placement location using said scale factor.

11. The computer-readable medium of claim 10, wherein said container region is part of a first image and said object is part of a second image.

12. The computer-readable medium of claim 10, wherein said step of identifying said container region further comprises the steps of:

evaluating pixels neighboring a seed pixel to determine if said pixels have a similar color value as said seed pixel; and  
growing said container region by iteratively identifying pixels having said similar color value.

13. The computer-readable medium of claim 10, wherein said step of identifying said object further comprises the steps of:

evaluating pixels in a boundary region to determine if said pixels have a similar color value to as a boundary pixel; and

growing said boundary region by iteratively identifying pixels having said similar color value.

14. The computer-readable medium of claim 10, wherein said step of determining a placement location within said container region and said scale factor associated with said object further comprises the steps of:

    determining a scale factor;

    determining whether said object will fit into said container region at said scale factor;

    if said object will fit into said container region at at least one location, selecting a placement location for said object; and

    otherwise, reducing said scale factor and determining whether said object will fit into said container region at said reduced scale factor.

15. The computer-readable medium of claim 11, further comprising the step of:

    downsampling said first image prior to identifying said container region

16. The computer-readable medium of claim 10, wherein said step of selecting said placement location for said object further comprises the step of:

    identifying a plurality of feasible placement locations for said object within said container region at said scale factor; and

selecting one of said plurality of feasible placement locations as said placement location.

17. The computer-readable medium of claim 16, wherein said step of selecting one of said plurality of feasible placement locations as said placement location further comprises the step of:

determining a mean center associated with origin points of said plurality of feasible placement locations; and

selecting said mean center as an origin point of said placement location.

18. The computer-readable medium of claim 10, wherein said step of inserting said object into said container region at said placement location using said scale factor further comprises the steps of:

determining a boundary associated with a scaled version of said object;

storing said boundary and said placement location; and

inserting said object into said container region using said stored boundary and placement location.

19. An image processing system comprising:

a processor for inserting an object into a container region by: segmenting said object and said container region; determining a placement location within said container

region for said object and a scale factor associated therewith; and inserting said object into said container region at said placement location using said scale factor to generate a composite image; and

an output device for outputting said composite image.

20. The image processing system of claim 19, wherein said processor identifies said container region by evaluating pixels neighboring a seed pixel to determine if said pixels have a similar color value as said seed pixel; and growing said container region by iteratively identifying pixels having said similar color value.
21. The image processing system of claim 19, wherein said processor identifies said object by evaluating pixels in a boundary region to determine if said pixels have a similar color value to as a boundary pixel; and growing said boundary region by iteratively identifying pixels having said similar color value.
22. The image processing system of claim 19, wherein said processor determines a placement location within said container region and said scale factor associated with said object by: determining a scale factor; determining whether said object will fit into said container region at said scale factor; if said object will fit into said container region at at least one location, selecting a placement location for said object; and otherwise, reducing

said scale factor and determining whether said object will fit into said container region at said reduced scale factor.

23. The image processing system of claim 19, wherein said processor downsamples said second image prior to segmenting said container region.

24. The image processing system of claim 19, wherein said processor identifies a plurality of feasible placement locations for said object within said container region at said scale factor; and selects one of said plurality of feasible placement locations as said placement location.

25. The image processing system of claim 24, wherein said processor determines a mean center associated with origin points of said plurality of feasible placement locations and selects said mean center as an origin point of said placement location.

27. The image processing system of claim 19, further comprising:  
a memory device for storing a boundary associated with a scaled version of said object;  
wherein said processor inserts said object into said container region using said stored boundary and placement location.

28. An image processing system comprising:

means for segmenting an object and a container region;

means for determining a placement location within said container region for said object and a scale factor associated therewith; and

means for inserting said object into said container region at said placement location using said scale factor.